

REMARKS

Claims 1-22 are pending in the application, of which Claims 1 and 12 are independent. Claims have been rejected under 35 U.S.C. 112, first paragraph, under 35 U.S.C. 112, second paragraph, under 35 U.S.C. 102(e), and under 35 U.S.C. 103(a). Applicants respectfully traverse the rejections and request reconsideration.

Information Disclosure Statement

The Office has provided a page of an Information Disclosure Statement (IDS) numbered “1 of 1” to Applicants and has noted that the Office believes that the IDS page was included by mistake. Applicants agree, and note that the IDS page was likely grouped with Applicants’ own IDS by USPTO personnel, as the page includes an attorney docket number of “P72562US0,” which is not the type of number used by Applicant’s representatives. Further, the format of the page is different from the format used by Applicant’s representatives.

According to section 724.05(III) of the MPEP, “[w]here the Office can determine the correct application file that the papers were actually intended for, based on identifying information in the heading of the papers (e.g., application number, filing date, title of invention and inventor(s) name(s)), the Office will transfer the papers to the correct application file for which they were intended without the need of a petition.” The page includes an attorney docket number, inventor name, and filing date; thus, if the Office can determine from this information for which application file the IDS page was intended, the page should be transferred from the present application’s file to the correct file. Applicants do, however, acknowledge the examiner’s consideration of the references.

Suggested Amendments Regarding Functional Claim Language

The Office has suggested amending the system claims to use the word “programmed” instead of “configured” to recite functional language. Clearly, a system programmed to perform the recited functions falls within the scope of Applicant’s invention. Accordingly, Applicants are amending Claims 12, 14, and 17-22 as suggested.

Objection to the Specification

The specification has been objected to as failing to provide proper antecedent basis for the term “kernel events,” as recited in independent Claims 1 and 12. The term “kernel events” is used because the sensed events are sensed by, and thus, within an operating system kernel (*see Applicants’ specification, page 4, lines 5-17, and page 9, lines 1-6 and 12-17*). As such, Applicants respectfully request withdrawal of the objection to the specification.

Rejections Under 35 U.S.C. 112, First Paragraph

Claims 1-22 have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Office asserts that the element of “*the atomic events being low level kernel events*,” as previously recited in independent Claims 1 and 12, fails to comply with the written description requirement because, according to the Office, the atomic events (i) are not disclosed as being kernel events and (ii) are not all low-level events.

As presented above, the term “kernel events” is used because the sensed atomic events are sensed within an operating system kernel. Additionally, Applicants respectfully submit that “atomic events” are defined in the specification to be all low-level events, and do not include high-level events. The plain meaning of the term “atomic,” as used in Applicants’ disclosure, refers to something that is at its lowest level, or indivisible, like an atom was once thought to be. The events called “atomic events” are the lowest-level events and are not divided into multiple sub-events. Examples of these low-level events are listed as action types 1-25 in Figs. 4A-B. The Office suggests, however, as stated in its rejection under 35 U.S.C. 112, second paragraph, that there are conflicting explanations in Applicants’ specification regarding “atomic events”; namely, that page 6, line 5, and page 11, line 10, conflict. Applicants respectfully disagree that the explanations are conflicting.

Applicants’ specification states on page 6, line 5, that “Figs. 4A and 4B are a table of possible low level atomic events.” The fact that Figs. 4A-B happen to list other types of events (high-level action types 26-43), in addition to the low-level events, does not mean that all of the listed events should be interpreted as being “low level atomic events,” especially in view of the fact that action types 1-25 are clearly shown as being low-level events, and that action types 26-43 are clearly shown as being high-level events. Applicants’ specification further states on page

11, line 10, that “A comprehensive list of typical high level event patterns is shown in Figs. 4A and 4B.” Again, the fact that Figs. 4A-B happen to list other types of events (low-level action types 1-25), in addition to the high-level events, does not mean that all of the listed events should be interpreted as being high-level events. Anyone looking at the “level” column in Figs. 4A and 4B and seeing some entries labeled as “Low” and others as “High” would also reach the same conclusion. The specification even states on page 11, lines 11-12, that Figs. 4A and 4B include “43 different action types, some of which are low level atomic events and others which are high level aggregate events.”

This is also explained on page 12, lines 5-7, of Applicants disclosure, which states that “a high level aggregate event (action types 26-42) is determined after seeing a specific sequence of lower level events (action types 1-25)” (emphasis added). For example, action type 26 is designated as a high-level event and is named “FileEdited.” Referring to Fig. 5A, the first row shows that a FileEdited event constitutes a certain pattern of low-level events. Those low-level events are either FileRead, FileWrite, or FileReadWrite events (*i.e.*, action types 1-3).

As such, Applicants respectfully submit that the portions of the specification cited by the Office do not conflict, and respectfully request withdrawal of the rejections of Claims 1-22 under 35 U.S.C. 112, first paragraph. Although Applicants note that the cited portions should already not be interpreted to mean that either all events listed in Figs. 4A-B are low-level events or that all events are high-level events, Applicants are amending page 6, line 5, of the specification to recite that “Figs. 4A and 4B are a table of possible low level atomic events and higher level aggregate events,” and are amending page 11, line 10, to recite that “A comprehensive list of typical low level atomic events and high level event patterns is shown in Figs. 4A and 4B.”

Rejections Under 35 U.S.C. 112, Second Paragraph

Claims 1-22 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In particular, the Office asserts that Applicants have shown “atomic events” to be both low and high level events in Fig. 4A and 4B. The Office further states that the specification does not include “a definition with sufficient deliberateness, clarity, and precision to lexicographically

define ‘atomic events.’” Applicants respectfully note that they are not attempting to lexicographically define the term “atomic events.” According to section 2111.01(IV) of the MPEP, an applicant may set forth a definition that is different from its ordinary meaning; but as presented above, Applicants use the ordinary term “atomic” to mean, for example, lowest level or indivisible. As such, the term “atomic events” should be interpreted to mean low-level events, such as the low-level described in Applicants’ disclosure. Therefore, Applicants respectfully submit that the term “atomic events” is not indefinite.

Additionally, the Office asserts that sensing events “from within an operating system kernel” is unclear as to whether the sensing occurs in the kernel, or if events from the kernel are sensed outside the kernel. As described in Applicants’ specification on at least page 4, lines 5-17, the sensing of atomic events occurs in the kernel. Further, Claim 12 recites that “the sensor [is] located within an operating system kernel.” Nevertheless, Applicants are amending independent Claims 1 and 12 to remove the word “from”; thus, reciting sensing events “within an operating system kernel.” Therefore, Applicants respectfully submit that Claims 1 and 12 are not indefinite. As such, Applicants respectfully request withdrawal of the rejections of Claims 1-22 under 35 U.S.C. 112, second paragraph.

Rejections Under 35 U.S.C. 102(e)

Claims 1-5, 7, 8, 10-13, 15, 16, 18, 19, 21, and 22 have been rejected under 35 U.S.C. 102(e) as being anticipated by Carter *et al.* (U.S. Pub. No. 2003/0051026, hereinafter “Carter”).

In their previous response, Applicants submitted that Carter does not teach or suggest that atomic events are sensed “*within an operating system kernel of a user client device,*” as claimed in Claims 1 and 12, and provided two reasons: (1) Carter’s NSSS does not sense events at an end user client device, and (2) the NSSS does not sense events within a kernel of an operating system of that device.

The Office asserts that the events of Carter are sensed at a switch controlled by Carter’s NSSS (*see* Carter, reference numeral 18 of Fig. 1). The Office also asserts that a workstation of Carter’s Fig. 1 discloses the claimed end user client device. Applicants previously submitted that if Carter’s NSSS senses events at the switch of Fig. 1, then the NSSS does not sense events at a workstation of Fig. 1. The Office responded to this on page 15 of the present Office Action by

asserting that, as presented in the rejections under 35 U.S.C. 112, second paragraph, the claim language of “*from within an operating system kernel*” was open to alternate interpretations and that the Office did not take the interpretation previously argued by Applicants. The possible multiple interpretations have been addressed by Applicants’ removal of the word “from,” as presented above; thus, it is respectfully submitted that there should no longer be such an alternative interpretation for the Office to reasonably take.

Furthermore, the Office previously cited paragraph [0147] of Carter as disclosing that the sensing step of the NSSS is located within an operating system kernel, but the Office now cites paragraph [0810], which states that “[w]henever a user attempts a guarded operation … the kernel relays the attempted operation to the watchdog system.” The cited watchdog system is used to control access to files (*see* Carter, paragraph [0797] and [0810]). Access to the files is based on a list of permissions and viewing rights (*see* Carter, paragraph [0809]), not based on an aggregation or combination of low-level events, as recited by Claims 1 and 12. Even if Carter’s watchdog system were interpreted as disclosing the sensing of atomic events within an operating system kernel, the system bases its determination to grant a user access to a file based on a single event in which the user attempts to access the file. The watchdog system does not disclose “*aggregating multiple atomic level events to determine a combined event*,” as recited by Claim 1 and as similarly recited by Claim 12. Additionally, the watchdog system does not disclose “*asserting a policy violation predicate upon an occurrence of a combined event*,” as recited by Claim 1, or “*determin[ing] whether an aggregate event has occurred that violates a predefined digital asset usage policy*,” as recited by Claim 12. Further, the watchdog system does not disclose that any asserting or determining of a policy violation predicate is “*implemented in the operating system kernel*,” as recited in dependent Claim 2 and as similarly recited in dependent Claim 13.

Moreover, as previously submitted, Carter suggests that the NSSS is not part of an operating system kernel, because Carter discloses that the NSSS has a priority that is higher than that of a kernel (*see* Carter, paragraphs [0588] and [0589]) and that the NSSS may be in communication with and pass messages to the kernel (*see* Carter, paragraphs [0931] and [0936]), thus, suggesting that the NSSS and the kernel are separated. This is further supported by the fact

that the watchdog system is not part of a kernel, but is only in communication with the kernel (*see Carter, paragraphs [0810] and [0868]*).

Applicants are also amending Claims 1 and 12 for further clarification. Particularly, the independent Claims now recite in more detail that the security perimeter is a “*point-of-use security perimeter that includes the operating system kernels of two or more data processing devices*,” as recited in Claim 1 and as similarly recited in Claim 12. Support for the amendments can be found in Applicants disclosure on at least page 4, lines 1-13; page 5, lines 26-28; page 13, lines 11-18; Fig. 1; and lines 5-8 of the Abstract. Cited reference Carter discloses a traditional security system, which attempts to prevent access by outside users at a point of network access. Rather than establishing a perimeter at external points of access to a network, the claimed invention establishes a security perimeter at the points of digital asset use (*i.e.*, within the kernels of the user devices). Carter does not disclose this type of perimeter.

Therefore, Applicants respectfully submit that Claims 1, 2, 12, and 13 are novel and nonobvious over the cited art. Dependent Claims 3-5, 7, 8, 10, 11, 15, 16, 18, 19, 21, and 22 depend from independent Claims 1 or 12 and include the elements of Claims 1 or 12 presented above as being novel and nonobvious over the cited art. Therefore, Applicants respectfully submit that these dependent claims are novel and nonobvious over the cited art for at least the same reasons as presented above for independent Claims 1 and 12.

As such, Applicants respectfully request withdrawal of the rejections of Claims 1-5, 7, 8, 10-13, 15, 16, 18, 19, 21, and 22 under 35 U.S.C. 102(e).

Rejections Under 35 U.S.C. 103(a)

Claims 1-5, 7, 8, 10-13, 15, 16, 18, 19, 21, and 22 have been alternatively rejected under 35 U.S.C. 103(a) as being unpatentable by Carter in view of Danieli (U.S. Patent No. 6,510,513).

Claims 6, 17, and 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Carter in view of Admitted Prior Art.

Claim 9 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Carter in view of Danieli.

Even if Danieli was combined with Carter for the purpose of teaching the use of a digital asset outside of a security perimeter, as explained by the Office, the combination would not cure

the deficiencies of Carter presented above with respect to independent Claims 1 and 12. Therefore, Applicants respectfully submit that Claims 1-5, 7, 8, 10-13, 15, 16, 18, 19, 21, and 22 are novel and nonobvious over such a combination of Carter and Danieli. As such, Applicants respectfully request withdrawal of the rejections of Claims 1-5, 7, 8, 10-13, 15, 16, 18, 19, 21, and 22 under 35 U.S.C. 103(a).

Dependent Claims 6, 9, 17, and 20 depend from independent Claims 1 or 12 and include the elements of Claims 1 or 12 presented above as being novel and nonobvious over the cited art. Therefore, Applicants respectfully submit that those dependent claims are novel and nonobvious over the cited art for at least the same reasons as presented above for independent Claims 1 and 12. As such, Applicants respectfully request withdrawal of the rejections of Claims 6, 9, 17, and 20 under 35 U.S.C. 103(a).

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 
Patrick A. Quinlan
Registration No. 61,287
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Date: 4/8/09